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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,552	01/23/2002	Goo-Man Park	P56637	4920

7590 09/12/2006

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Washington, DC 20005

EXAMINER

VO, TUNG T

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 09/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/052,552	<b>Applicant(s)</b> PARK ET AL.	
	<b>Examiner</b> Tung Vo	<b>Art Unit</b> 2621	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Kirsten, US 6,011,901 as set forth in the previous Office Action dated 06/30/2006.

3. Claims 1 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim (US 6,912,351).

Re claims 1 and 26, Kim discloses a multi-channel image encoding apparatus (fig. 2) for selectively receiving image signals transmitted through a plurality of input channels (Cameras 1- cameras n, selection 80 of fig. 2) and encoding (110 of fig. 2) the image signals, comprising: a channel data processor (the combination of 80, 90, 100, 110 of fig. 2) comprising a frame buffer group (100 of fig. 2) including a plurality of frame buffers (memories for storing I, B, P pictures or frames of each input signal) for each input channel in order to receive a plurality of frame data (I, B, P frame data) through the plurality of input channels and to store the plurality of frame data, the channel data processor (S03 of fig. 3) for selecting data transmitted to the frame buffer group to output the selected data, the channel data processor (100 of fig. 2) storing each unit of the frame data into the frame buffer group corresponding to each channel in accordance with a set-up input channel selection order (I, B, P order); and an encoder (110 of fig. 2) for encoding

Art Unit: 2621

image signals output from the channel data processor with a Moving Picture Experts Group method; a first multi-switch unit (80 of fig. 1) selectively contacting each one of the input channels with the plurality of frame buffers of the frame buffer group corresponding to each one of the input channels, each one of the input channels corresponding to a specific and exclusive plurality of frame buffers in the frame buffer group; and a second multi-switch unit (S03 of fig. 3, Note read out I, B, P order to the encoder (110 of fig. 2)) for selectively contacting with each one of the plurality of frame buffers (I, B, P memories) of the frame buffer group corresponding to each one of the input channels, and outputting data output from the plurality of frame buffers of the frame buffer group corresponding to each one the input channels, to the encoder (110 of fig. 2).

### *Response to Arguments*

4. Applicant's arguments filed 06/30/2006 have been fully considered but they are not persuasive.

The applicant argued that Kirsten does not to disclose a frame buffer group including a plurality of frame buffers for each input channel in order to receive a plurality of frame data through the plurality of input channels and to store the plurality of frame data, pages 14 and 15 of the remarks.

The examiner respectfully disagrees with the applicant. It is submitted that Kirsten discloses a memory (102 of fig. 4) for storing one selected input channel, wherein the memory (102) comprises arrays for storing frames of the one selected channel through the plurality channels (1-8 of fig. 4) so this is interpreted a frame buffer group including plurality of frame

Art Unit: 2621

buffers for each input channel in order to receive plurality frame data through the plurality channels. In view of discussion above, Kirsten anticipates the claimed invention.

The applicant further argued that Kirsten fails to disclose the channel data processor storing each unit of the frame data into the frame buffer group corresponding to each channel in accordance with a set-up input channel selection order, page 15 of the remarks.

The examiner respectfully disagrees with the applicant. It is submitted that Kirsten the channel data processor (fig. 4) for storing each unit (image data is stored in the field or frame order, 102 of fig. 4) of the frame data into the frame buffer group (the arrays in the memory, 102 of fig. 4) corresponding to each channel (the video selector (70 of fig. 4) for selecting one channel then sending the selected channel to the memory (102 of fig. 4) so that the memory (102) is storing the selected channel (each or one channel) in accordance with a set-up input channel selection order (70 of fig. 4). In view of the discussion above, Kirsten anticipates the claimed invention.

The applicant argued that Kirsten does not a second multi-switch unit for selectively contacting with the frame buffer group and outputting data output from the frame buffer group to the encoder, pages 15 and 16 of the remarks.

The examiner respectfully disagrees with the applicant. It is submitted that Kirsten teaches the controller (104 of fig. 4) controls the memory (102 of fig. 4) to read out one channel signal from the memory to the encoder (74 of fig. 4) so this meets a second multi-switch unit for selectively contacting with the frame buffer group and outputting data output from the frame buffer group to the encoder. In view of the discussion above, Kirsten anticipates the claimed invention.

Art Unit: 2621

The applicant further argued not stating that the DCT performs with respect to the signals input from the second multi-switch unit, page 17 of the remarks.

The examiner respectfully disagrees with the applicant. It is submitted that Kirsten the encoder (fig. 11A) is conventional MPEG standard encoder that comprises the DCT performs with respect to the signals input (un-compressed input images is from the memory (102 of fig. 4)) from the second multi-switch unit (104 of fig. 4, Note controlling the memory to read out the channel output from the memory (102)). In view of the discussion above, Kirsten anticipates the claimed invention.

It is noted that MPEG encoder inherently discloses DCT, quantizing (Q) inversely quantized (IQ), an inverse DCT (IDCT), Prediction memory, and variable length coding (VLC), and inter and intra encoding mode support by Chiang et al. (US 6,192,081).

### *Conclusion*

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2621

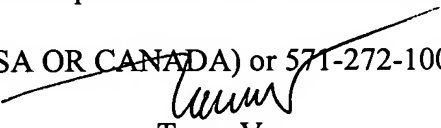
however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Tung Vo  
Primary Examiner  
Art Unit 2621